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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,571	04/13/2001	Kao Yi Sheng	ACR0027-US	2571
28970	7590	12/19/2003	EXAMINER	
SHAW PITTMAN			PHAN, RAYMOND NGAN	
IP GROUP			ART UNIT	
1650 TYSONS BOULEVARD			PAPER NUMBER	
SUITE 1300			2111	
MCLEAN, VA 22102			DATE MAILED: 12/19/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Applicant No.	Applicant(s)
	09/833,571	SHENG, KAO YI
Examiner	Art Unit	
Raymond Phan	2181	

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on \_\_\_\_.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-14 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_ is/are allowed.

6) Claim(s) 1-14 is/are rejected.

7) Claim(s) \_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)                    4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                    5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.

6) Other: \_\_\_\_.

### **Part III DETAILED ACTION**

#### *Notice to Applicant(s)*

1. This application has been examined. Claims 1-14 are pending.
2. The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2111.

#### *Specification*

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

#### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Seo et al. (US No. 6,044,423) in view of Sakarda et al. (US No. 6,594,721)

In regard to claims 1, 9, Seo et al. disclose the computer system with hot swap function comprising a computer peripheral device having a signal connector (see figure 3, col. 3, lines 52-65); a motherboard having BIOS (see figure 3, col. 3, lines 18-20); a software controller 110 (i.e. CPU) for controlling the signal communication of the computer and the power of the computer peripheral device

(see figure 3); a circuit board 130 (i.e. FDD/IDE controller) forming on the slot for accommodating the computer peripheral device, comprising a first connector, second connector and signal connection device (see figure 3, col. 4 lines 11-30) ; wherein the computer peripheral device connects to the first connector and second, then the signal connector device judge the type of the peripheral device from the connection signal (i.e. read out signal) and transmits the result of the judgement to the motherboard, and then the software controller starts the computer peripheral device according to the result of the judgement (see col. 4, line 53 through col. 5, line 11). But Seo et al. do not specifically disclose the signal connector in a predetermined position. However Skarda et al. disclose the multiple bay with predetermined positions (i.e. master, slave) (see figure 2, col. 10, line 40 through col. 11, line 24). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Sakarda et al. within the system of Seo et al. because it would provide greater flexibility of expansion to the computer system without adding weight to the computer system.

In regard to claim 2, Seo et al. disclose the signal connector connects with the circuit board (see col. 3, line 65 through col. 4, line 10); the circuitry of the circuit board transmits the connect signal to the signal connection device (see col. 3, line 65 through col. 4, line 10); the signal connection device automatically detects the type of the peripheral device from the connection signal (see col. 4, lines 12-30); the BIOS get the detection signal (see col. 4, lines 52-62); the software controller call the BIOS and getting the detection signal and the software controller provides the peripheral device with power and starts the peripheral device according to the detection result (see col. 4, line 53 through col. 5, line 11).

In regard to claim 3, Seo et al. disclose the claimed subject matter as discussion above rejections except the software controller gets the information of the position of the peripheral device; the software controller shut off the peripheral device and the power thereof; and the software controller permits the signal connector releasing from the circuit board. However Sakarda et al. disclose the software controller gets the information of the position of the peripheral device (see col. 13, line 60 through col. 14, line 62); the software controller shut off the peripheral device and the power thereof (see col. 13, line 60 through col. 14, line 62); and the software controller permits the signal connector releasing from the circuit board (see col. 13, line 60 through col. 14, line 62). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Sakarda et al. within the system of Seo et al. because it would provide greater flexibility of expansion to the computer system without adding weight to the computer system.

In regard to claims 4, 11, Seo et al. disclose the OS, through the software controller, to decide on starting up and shutting off the peripheral device (see col. 4, line 54 through col. 5, line 12).

In regard to claims 5, 10, Seo et al. disclose the circuit board comprising a third connector forming on another slot for accommodating the peripheral device 140 (see figure 3, col. 4, lines 54-63).

In regard to claims 6, 12, Seo et al. disclose wherein the peripheral device can be one selected from FDD, DVD, HDD, CDR, CD R/W and other data storage devices (see col. 3, lines 52-64).

In regard to claims 7, 13, Seo et al. disclose wherein the first connector is for connecting with the computer peripheral device having FDD interface (see col. 4, lines 12-30).

In regard to claims 8, 14, Seo et al. disclose wherein the second connector and the third connector are for connecting with the peripheral device having IDE interface (see col. 4, lines 54-63).

***Conclusion***

6. All claims are rejected.

7. The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure.

**Hartung et al. (US No. 5,920,709)** disclose a bus interface for IDE device.

**Boesch et al. (US No. 5,822,547)** disclose a method and apparatus for providing a portable computer with hot pluggable modular bays.

**Lee (US No. 6,115,765)** discloses a method of swapping auxiliary storage devices using a suspend mode.

**Park (US No. 5,654,842)** discloses a swap bay device supporting both master mode and slave mode and portable computer having the same.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Raymond Phan, whose telephone number is (703) 306-2756. The examiner can normally be reached on Monday-Friday from 6:30AM- 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Primary, Paul Myers can be reached on (703) 305-9656 or via e-mail addressed to paul.myers@uspto.gov. The fax phone number for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [raymond.phan@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver

of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

A handwritten signature in black ink, appearing to read "Raymond Phan".

***Raymond Phan***  
12/12/03